CHAPTER 8

TRANSPORTATION AND MOBILITY

Market Street Bridge, Bike Trail and the Great Miami River

INTRODUCTION

Maintenance of existing developed areas as well as any future growth and expansion within Troy are dependent upon an efficient transportation network. Such a network allows goods and services to be moved in and out of the City for economic health and prosperity. Lack of an adequate transportation network will lead to a stagnant or declining economy.

Troy has historically been well linked with the major modes of transportation: first with the Great Miami River and nearby post roads, then with the Miami-Erie Canal and the railroads, and now with highway and air networks. Today, thoroughfares, the most dominant mode of travel for either people or cargo, provide access to the entire study area, as well as links to the rest of the Miami Valley. Six modes of transportation are currently important to the immediate Troy area: 1) air, 2) rail, 3) recreational trails, 4) pedestrian systems, 5) public transit, and 6) thoroughfares.

AIR TRAVEL

Today, long distance travel to and from Troy is fast and economical because of ready access to air travel. The major point of entry for passenger and freight flights into the Miami Valley region is fifteen minutes from Troy at the Dayton International Airport. Flight connections are available to national and international destinations.

Dayton International Airport offers a tremendous economic asset to Troy and the surrounding Miami Valley region as a whole, linking it to distant markets around the globe. The airport is the 10th largest cargo hub in the United States and 15th in the world. Menlo Forwarding has its North American hub here, and is the airport's major freight operation. More than 400 Menlo Forwarding freight terminals throughout North America and in 89 countries around the world are served from this major hub.

The airport is also one of the top 100 passenger service airports in the United States. In 2002, more than 2.28 million passengers came through the Dayton International Airport. Passenger carriers at Dayton International Airport include Delta, American, AirTran, ATA, Continental, Northwest, Skyway, United, and US Airways.

Small aircraft can be accommodated within the Troy vicinity. Activated for aircraft use in September 2000, the WACO Field Airport includes a 1920s-styled, 2,200 foot (1,800 usable) grass turf airstrip and modern aircraft hangar. The airstrip is privately owned and operated by the WACO Historical Society. It was designed specifically for open-cockpit WACO biplanes and other light aircraft.

RAIL SERVICE

The active railway serving Troy is a CSXT "Class A" mainline. This is a major north-south line for the United States, handling greater than 20 million tons of freight a year - mainly agricultural products, metals and minerals - compared to the 46 million tons CSXT moves each year throughout the state. This particular line generally follows Interstate 75 and the Great Miami River through Miami County, passing through Troy. It is used for freight and cargo without passenger service.

Passenger Rail is another mode that is being investigated at the State and regional level for its feasibility in Ohio. How to pay capital and operational costs and securing access from private property for public use is a monumental task. The financial and economic feasibility could not be accomplished without a public/private partnership. Recently released October 2004 study titled "The Ohio and Lake Erie Regional Rail Ohio Hub Study" and conducted by the Ohio Rail Develolpment Commission addresses the feasibility of the passenger rail connecting Cleveland, Columbus and Cincinnati together. Accordingng to the study the passenger rail is not a viable option for the Region at the moment primarily because of the huge "unknowns" in emerging federal passenger rail development programs, some of which center around Amtrak's role and funding structures. The "Ohio Hub System" study indicates continued effort with developing coaltion forces, public input, and completion of econmic inpact anaysis. Currently the closest passenger rail (Amtrak) station to Troy is found in Hamilton, approximately 47 miles away.

RECREATIONAL TRAILS/BIKEWAYS

Troy's first endeavors into recreational trail and bikeways started in the early 1970s. With the more recent resurgence in multi-modal uses of recreational trails, Troy began expanding the trail system in the early 2000s. The Miami County Recreational Trail Task Force was also created at that time to promote trail connections between cities. As trails are extended and connections are made, bicycle travel is becoming viable for more than just children riding to a nearby school. The Downtown Troy Streetscape project, for example, included bike racks in the Public Square. Details on the existing

trails and the expansion plans are included in Chapter 12 Parks, Recreation, and Open Space.

PEDESTRIAN-FRIENDLY DESIGN

With renewed emphasis on fitness and wellness, more and more people are walking, biking, and skating. As noted above, these activities are being served by Troy's recreational trails and bikeways. The trails are also becoming a travel route for some pedestrians on errands or even commuting to work.

Recognizing this increase in pedestrian traffic, the City of Troy has improved the pedestrian walkways in Downtown Troy and has embarked on a Sidewalk Repair Program throughout the City. This program is aimed at improving the safety along sidewalks by eliminating the hazards caused by raised or sunken sidewalks. Improved sidewalks are provided along most of the local streets, within subdivisions, and in the downtown area. Future phases of the Sidewalk Repair Program will also include installing sidewalks in those neighborhoods where there are missing gaps of sidewalk, eventually providing safe walkways for pedestrians citywide.

New buildings are also being designed with more attention to details that make pedestrian traffic easier or safer. Businesses and churches near neighborhoods were the first to understand this issue, but have since been joined by national chains and large businesses. Local and state highway improvement projects now routinely include provisions for pedestrians. In Troy, this is creating support for development of a pedestrian route over I-75, linking east and west.

PUBLIC TRANSIT

Introduction

In the first half of the 1900s, public transportation in Troy and throughout Miami County had been provided by railroads, inter-urban traction lines, inter-city busses, and local taxi services. After World War II, private automobile availability and use increased dramatically. As a result, many of the public transportation methods fell into decline. This left a part of the population without alternatives for inter-city and even some intra-city travel. In 1968, the Miami County Community Action Council (CAC) was established as a non-profit agency to develop, implement, and operate various human services within the Troy and Miami County. The CAC also emerged as the major organizational entity offering public transit to various human service agencies.

In 1975, the Miami County Commissioners attempted to establish a Miami County Regional Transit Authority by combining resources from several agencies to provide public transit on a countywide basis. That initial effort failed, but in the early 1980s, Piqua and Troy were able to obtain federal transportation grants to support local public

transit. These services operated in conjunction with the human services transportation provided by the CAC. In 1986 the Miami County Commissioners successfully applied for federal operating and capital improvement funds for countywide transit service. By 1995, the CAC had assumed the operating role and grant administration for all public transit throughout Miami County.

By 2000, the Miami County Transit Service (MCTS) was the only public transit provider in Troy. Local taxis had disappeared, as had inter-city bus service. At that time, the MCTS was financed by grants from the Federal Transit Administration, the Ohio Department of Transportation, the Area Agency on Aging, and from user fares. Service was provided on an on-call basis. There were no fixed routes. The MCTS provided curb to curb transportation by vans and cars, between Tipp City, the Upper Valley Medical Center, Troy, Covington, Piqua, and other parts of Miami County.

The Future of Transit Service in Troy

As a result of the 2000 United States Census, the Troy, Tipp City and West Milton areas were designated as part of the greater Dayton urbanized area. This designation directly affects the transit funding Miami County receives from both the Federal Transit Administration and the Ohio Department of Transportation. Less funding is provided to urbanized areas than to rural areas.

Due to the change in designation, MCTS experienced a major transition. In October 2003, Miami County's Board of Commissioners reorganized transit service and awarded an operating contract to Laidlaw, a private company. New transit service began in January 2004. Transit service remains a curb-to-curb demand response type with a new fare schedule and some weekend service. The projected costs of the transit system for 2004, 2005, and 2006 are $545,250, $566,750, and $586,750. Miami County created a Department of Transportation to oversee the administrative functions of the system. The department also provides a base facility and maintenance of the existing fleet.

As of mid-2004, the Miami County Commissioners were still exploring alternative methods for funding public transit in the future. Because of the high cost of full transit by fixed routes, MCTS is expected to remain an on-demand transit system, providing public transportation service primarily to those residents without access to an automobile of their own.

THOROUGHFARES

Introduction

Most travel in Troy is accomplished by private trucks and cars operating on city streets. This includes even short trips for many people. Increasing numbers of trips obviously leads to increased traffic, which is traditionally addressed in a thoroughfare plan.

Thoroughfares serve two functions, 1) mobility and 2) access to land use. The viability of land use is dependent on certain levels of accessibility. Thoroughfares act as a circulation system routing residents to their destinations throughout Troy and the region. They also provide efficiency in the movement of goods throughout the region. A thoroughfare plan is designed to meet the needs of future traffic demands and enable the City to ultimately provide an adequate street system. The plan consists of a program of proposed systematic and gradual changes. A well-planned and detailed thoroughfare plan is vital for healthy development within a city.

Development of Thoroughfares in Troy

The City of Troy has a long history of transportation and thoroughfare planning. In the 1960s, the City adopted a Thoroughfare Plan that focused on the concept of a series of ring roads and/or loops around the city. The smaller rings would serve the city center while the larger rings would provide continuous movement beyond the central business district. During this time, the City also focused on connecting northern residential areas to both the downtown shopping area and industrial areas.

In 1972, the City of Troy adopted a new Comprehensive Plan which included a Thoroughfare Plan. That Plan updated the previous thoroughfare plan and continued with the 1960s concept of a series of ring roads and/or loops around the City. These were identified as the inner belt, outer belt, and the downtown loop. From the findings in the Comprehensive Plan, it was concluded that as a result of the rapid and unexpected growth in the residential and commercial areas, changes for the immediate and extended service areas would be needed west of Interstate 75. Major street improvements were also listed for each of the inner belt, outer belt, and downtown loop sections of the City. These improvements included creating connections between existing thoroughfares, new bridges, and modifications to existing thoroughfares, signalization, and the widening of particular roads/streets.

In 1981, the City of Troy adopted another Thoroughfare Plan. This Plan predicted that the previously mentioned outer beltway would carry a significant amount of traffic, which in turn would divert some of this traffic away from the central business district. The information located in the 1981 plan was the basis for the future/proposed plan of the 1990s. The plan in the 1990s summarized existing thoroughfare networks and the surrounding 3-mile area while making recommendations for the same. Many of the improvements identified in the 1972 Thoroughfare Plan were still part of the plan in the 1990s.

Rural Thoroughfares

In 1974, Miami County prepared a Thoroughfare Plan which encompassed the entire county, including the City of Troy. This Plan gave extensive functional classifications of existing thoroughfares, looked at past and present traffic volume counts, and gave a summary of the inventory of physical characteristics of the highways, county roads, and township roads. The Plan also looked at different factors, which would affect the forecast of the County's 20 year traffic expansion. Physical layout, past and present traffic volume counts, population projections, and planned future land uses were seen as some, not all, of these factors. Although there were no specific recommendations given for the City of Troy, Concord and Staunton Townships were each given individual recommendations. Many of the recommendations for these townships were also identified as improvements in the City's 1972 Thoroughfare Plan.

In 1998, Miami County adopted a countywide Comprehensive Plan which included a more up to date version of the 1974 Thoroughfare Plan. This time, the Thoroughfare Plan was not as detailed. It provided a map showing existing and proposed thoroughfares as well as text that focused on the County's transportation goals, objectives, and policies. The Comprehensive Plan, in its transportation section, also gave an extensive listing of all thoroughfare classifications within the County.

Another transportation planning document that both Miami County and the City of Troy utilize as a planning reference is the Miami Valley Regional Planning Commission's 2025 Long Range Transportation Plan, which was originally adopted in 1997. This plan is continually updated and revised. It focuses on different factors including, but not limited to, development of long-range traffic patterns, fiscal constraints, air quality conformity, and project implementation.

Thoroughfare Classifications

The type of street upon which a property fronts significantly determines how intensely it may develop without creating undue congestion or safety hazards. Thoroughfares are separated into functional classifications according to the function they serve within the overall transportation network. Traffic volumes and intensity, continuity of travel movement, the proportion of through traffic to local traffic, and the number of necessary access points - both to other thoroughfares and to adjacent land - all play key roles in the design of each segment of the thoroughfare network.

The thoroughfare functional classification system for the Troy study area is shown on Figure 8-1, which is included at the end of this chapter. It reflects the following thoroughfare networks:

INTERSTATE HIGHWAYS are access controlled roadways connecting major population centers. They are devoted to serving high traffic volumes and long distance trips. Interstate Highways are under the control of the Ohio Department of

Transportation (ODOT) for purposes of design, access, and maintenance. The only such highway in Troy is Interstate 75.

ARTERIAL ROADWAYS are intended to maximize vehicular mobility and to link population centers. Arterial Roadways generally have a right-of-way width of 80 feet or more. They can be subdivided into Major and Minor Arterials. Major Arterials usually have minimal traffic control devices, limited driveway access and relatively high average speeds. They are expected to carry large volumes of traffic, fed by the network of collector streets. Major Arterials are often State Highways, and may be divided, and are under the control of ODOT for purposes of design, access, and maintenance. Major Arterials typically have a pavement width of a minimum of 49 feet and on-street parking is prohibited. Minor Arterials are more common in the Troy community. They will also have minimal traffic control devices, limited driveway access, but will not have high average speeds. On-street parking is usually prohibited. Minor Arterials are often State or County Roadways. Minor Arterials link population nodes with the major traffic generators such as employment and shopping centers. In accordance with Miami Valley Regional Planning Commission's (MVRPC) functional classification, the Minor Arterials in Troy include:

Parts of State Route 41
Part of State Route 718/Arthur Drive
Part of State Route 55
North Market Street
Part of Experiment Farm Road
Parts of County Road 25A

COLLECTOR ROADWAYS are roadways that link arterials and distribute traffic onto the more local streets. These roadways will have rights-of-way between 60 to 80 feet with at least two (2) lanes of moving traffic. Like the Arterial Roadways, Collector Roadway can be subdivided into Major and Minor categories. Major Collector Roadways in the urban areas of the community often have three (3) lanes of traffic and/or on-street parking. Major collector roadways often connect neighborhoods with the Arterial Roadways. In accordance with MVRPC's functional classification, the Major Collectors within the Troy area include:

Dorset Road (North and South)
Swailes Road
Wilson Road
Washington Road
Eldean Road
Part of Troy-Sidney Road
Piqua-Troy Road
McKaig Road
Riverside Drive
Adams Street

Additionally, the following roadways may be considered Major Collectors in the future local usage:

SR 202
Union Street
Archer Drive
Nashville Road
E. West Street
Ridge Avenue
Part of Fenner Road
Part of Lytle Road

MINOR COLLECTORS or Local Collectors are roadways that link and distribute traffic between local or neighborhood streets. Local collectors may provide direct access to adjoining properties. Ideally these streets abut neighborhoods or are located within them. In accordance with MVRPC's functional classification, the Minor Collectors within the Troy area include:

Part of Troy Sidney
Peters Road
Children's Home-Casstown Road

Additionally, the following roadways may be considered Minor Collectors in the future local usage:

Water Street
Meadowpoint Drive
Stoneycreek Drive
Stanfield Drive
Troy Urban Road
Barnhart Road

LOCAL STREETS are the most numerous type of street in most cities. This is also true in Troy. These streets with 50 to 70 foot right-of-ways are located in most neighborhoods and carry small amounts of traffic. On-street parking is allowed on most local streets as long as width and visibility is not a limiting factor. Local streets can be categorized into major and minor streets, however, this is usually used for purposes such as snowplow route and detours.

THOROUGHFARE PLAN

The thoroughfare system in any community is defined by the circulation patterns for vehicles and pedestrians. It is extremely important that the system is free-flowing and that all segments of it work together properly. It is design to meet the needs of future traffic demands and will enable the city to realize an efficient street system. The classifications listed above are used for not only the existing designated streets but are also intended to describe improvements to the facilities for the future. Roadways are planned to fit the intended land use patterns for each portion of the community and include a series of belts to help traffic flow between the natural (Great Miami River) and manmade (Interstate 75 and Railroads) barriers within the Troy community.

The Thoroughfare Plan for Troy is shown on Figure 8-2, included at the end of this chapter. The Thoroughfare Plan identifies the classifications of existing roadways as well as proposed roadways. While the final location of the proposed roadway may not be shown, the need for new roadways in the general vicinity is identified on the Thoroughfare Plan. The Thoroughfare Plan is also shown in Figure 14-6, with discussion points throughout Chapter 14.

THOROUGHFARE IMPROVEMENTS

Figure 8-3 which is titled “Thoroughfare Improvements” is a map with a list of 45 Road Improvements. These improvements are not prioritized in any way, but are simply noted for future projects. Many of these improvements have been on previous thoroughfare plans and have not yet come to fruition, possibly because of cost of the project and severity. The list of road improvements varies from a new interchange to straightening out a curve.

The same “Thoroughfare Improvements” map is illustrated in Figure 14-6. Chapter 14 describes more detail in each of the 45 transportation improvements.